What is claimed is:

1. A method for the measurement of a cellular process in one or more different populations of cells, the method comprising:

i) providing one or more different populations of cells adhering to support particles said support particles including a scintillant substance and being adapted for cell growth;

ii) introducing samples of each of said populations of cells, adhering to said support particles, contained in a fluid medium into separate reaction vessels for each population sampled;

iii) introducing into each reaction vessel a reagent labelled with a radioisotope under conditions so as to cause a portion of said radiolabelled reagent to become associated with said cells; and

iv) detecting light emission from the scintillant particles caused by radioactive decay of the radioisotope as a means of measuring said cellular process.

2. A method for the measurement of the effect of a test compound on a cellular process in one or more different populations of cells, the method comprising:

i) providing one or more different populations of cells adhering to support particles said support particles including a scintillant substance and being adapted for cell growth;

ii) introducing samples of each of said populations of cells, adhering to said support particles, contained in a fluid medium into separate reaction vessels for each population sampled;

iii) introducing into each reaction vessel a sample of a test compound whose effect on said cellular process is to be measured;

iv) introducing into each reaction vessel a reagent labelled with a radioisotope under conditions so as to cause a portion of said radiolabelled reagent to become associated with said cells; and

v) detecting light emission from the scintillant particles caused by radioactive decay of the radioisotope as a means of measuring the effect of the test compound on said cellular process.

3. The method of claim 2 wherein the measurement of step v) is compared with a measurement of a cellular process in one or more different populations of cells in the absence of the test compound.

4. The method of claim 2 wherein each of the cell samples is treated with different concentrations of said test compound in the presence of a fixed quantity of said radiolabelled reagent.

5. The method of claim 1 wherein different concentrations of said radiolabelled reagent are incubated with different samples of each of said cells in a fluid medium in separate reaction vessels.

6. The method of claim 1 wherein said vessel is a well of a multiwell plate.

7. The method of claim 1 wherein said detection step is performed in the presence of radiolabelled reagent both associated with said cells and in the fluid medium.

8. The method of claim 1 wherein said detection step is performed by scintillation counting.

9. The method of claim 1 wherein said detection step is performed by imaging.

10. The method of claim 1 wherein said cellular process is selected from biosynthesis, uptake, transport, receptor binding, metabolism, fusion, biochemical response, growth and death.

11. The method of claim 10 wherein said receptor binding comprises a specific binding interaction between the radiolabelled reagent and a specific binding partner located in or on the surface of the cells.

12. The method of claim 1 wherein the radioisotope is selected from ^{14}C, ^{3}H, ^{35}S, ^{33}P, ^{125}I, ^{32}P, ^{45}Ca, ^{55}Fe, ^{51}Cr, ^{86}Rb and ^{109}Cd.

13. The method of claim 1 wherein said cellular process is performed in real time using a non-invasive technique.

14. A solid support for cell based assays said support comprising particles including a matrix, and having a scintillant substance which has been coated onto, or integrated into, the matrix of the particles, and being adapted for cell growth.

15. The solid support of claim 14 wherein said particles comprise polymeric beads.

16. The solid support of claim 15 wherein said beads have a porous or macro-porous structure.

17. The solid support of claim 14 wherein said particles comprise a cross-linked dextran.

18. The solid support of claim 14 wherein said particles are in the form of a bead having a diameter in the range from 1μm to 500μm, and more preferably in the range from 50μm to 250μm.

19. The solid support of claim 14 wherein said scintillant substance is an inorganic scintillant preferably yttrium silicate (YSi) or yttrium oxide (YOx).